

**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L15	6626	361/692,694,695,699,700.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/08 16:33
L16	7	15 (piezoelectric\$3 or thermoelectric \$3 or electromagnetic adj3 (frequenc \$3 or amplitud\$3)) (vibrat\$3 adj3 (control\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/08 16:36
L17	1	15 (piezoelectric\$3 or thermoelectric \$3 or electromagnetic or actuator adj3 (frequenc\$3 or amplitud\$3)) (vibrat\$3 adj3 (control\$4)) (actuat\$3 adj3 (vibrat\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/08 16:36
L18	12	15 (piezoelectric\$3 or thermoelectric \$3 or electromagnetic or actuator adj3 (frequenc\$3 or amplitud\$3)) (vibrat\$3 adj3 (control\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/08 16:37
L19	0	15 (diaphragm adj3 (frequenc\$3 or amplitud\$3)) (vibrat\$3 adj3 (control \$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/08 16:37
L20	0	15 (actuat\$3 adj3 (frequenc\$3 or amplitud\$3)) (vibrat\$3 adj3 (control \$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/08 16:38
L21	1	15 (gas adj3 (eject\$3 or nozzle or pump\$3)) (frequenc\$3 or amplitud \$3) (vibrat\$3 adj3 (control\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/08 16:39
L22	7	15 (air or cool\$3 or fluid adj3 (eject \$3 or nozzle or pump\$3)) (frequenc \$3 or amplitud\$3) (vibrat\$3 adj3 (control\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/08 16:40
S1	34	((HI ROI CHI) near2 (ISHIKAWA)). INV.	US-PGPUB; USPAT; USOCR	AND	OFF	2010/01/05 12:47

S2	13	((TOMOHARU) near2 (MUKASA)). INV.	US-PGPUB; USPAT; USOCR	AND	OFF	2010/01/05 12:47
S3	4	("6123145"   "6588497").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/05 12:48
S4	43	("4171852"   "4180377"   "4261689"   "4406323"   "4450505"   "4495947"   "4501319"   "4941398"   "5034688"   "5087175"   "5121290"   "5395592"   "5402312"   "5742954"   "5861703"   "5894990"   "5931643"   "5953209"   "5988522"   "6059020"   "6123145"   "6315031"   "6343014"   "6356435"   "6405794"   "6457654").PN. OR ("6588497").URPN.	US-PGPUB; USPAT; USOCR	AND	OFF	2010/01/05 14:31
S5	114	(smith adj2 (courtney))	US-PGPUB; USPAT; USOCR	AND	OFF	2010/01/05 14:33
S6	0	(11/9111179).APP.	USPAT; USOCR	AND	OFF	2010/01/05 14:38
S7	10	("20050089415"   "20050056030"   "3373752"   "4498851"   "4648807"   "4923000"   "4350838"   "5336062"   "6123145"   "6588497"   "6123145"   "6367470"   "6588497").PN.	USPAT; USOCR	AND	OFF	2010/01/05 14:40
S8	43	("4171852"   "4180377"   "4261689"   "4406323"   "4450505"   "4495947"   "4501319"   "4941398"   "5034688"   "5087175"   "5121290"   "5395592"   "5402312"   "5742954"   "5861703"   "5894990"   "5931643"   "5953209"   "5988522"   "6059020"   "6123145"   "6315031"   "6343014"   "6356435"   "6405794"   "6457654").PN. OR ("6588497").URPN.	US-PGPUB; USPAT; USOCR	AND	OFF	2010/01/05 14:41
S9	0	("2006/0245163").URPN.	USPAT	AND	OFF	2010/01/05 14:43
S10	12	("20040223302"   "5758823"   "5798465"   "6123145"   "6353295"   "6588497").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/05 14:44
S11	30	("4109108"   "4648807"   "4665549"   "4753318"   "4923031"   "5058702"   "5077601"   "5270484"   "5692054"   "5758823"   "5798465"   "6123145"   "6588497"   "6937472").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/05 14:46
S12	231	glezer.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/05 15:02

S13	168489	("361").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/05 15:02
S14	5	S12 S13	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/05 15:02
S15	1	(11/599603).APP.	USPAT; USOCR	AND	OFF	2010/01/05 15:02
S16	1	(11/599628).APP.	USPAT; USOCR	AND	OFF	2010/01/05 15:03
S17	156	( "20010037875"   "20020056908"   "20020080582"   "20020098097"   "20030043531"   "20030066628"   "20030075615"   "20030110788"   "20030133587"   "20030177899"   "20040125561"   "20040231341"   "20050013116"   "20050031137"   "20050074662"   "20050105757"   "20050111185"   "20050121171"   "20050163338"   "20050284612"   "20060016581"   "20060022092"   "20060145027"   "20060164805"   "3464672"   "4031171"   "4170244"   "4238425"   "4257224"   "4350838"   "4406323"   "4498851"   "4501319"   "4533082"   "4590399"   "4590970"   "4595338"   "4664345"   "4667877"   "4693201"   "4697116"   "4697769"   "4708600"   "4727930"   "4763225"   "4780062"   "4802642"   "4923000"   "4930701"   "4930705"   "4932610"   "4938279"   "4938742"   "4939405"   "4941398"   "4969802"   "4976311"   "4989810"   "5008582"   "5034688"   "5040560"   "5083194"   "5107398"   "5137079"   "5142260"   "5154347"   "5156306"   "5165243"   "5183104"   "5190099"   "5199640"   "5199856"   "5209438"   "5226597"   "5242110"   "5251817"   "5303555"   "5316075"   "5335143"   "5346745"   "5361989"   "5395592"   "5402312"   "5411208"   "5419780"   "5429302"   "5437421"   "5493615"   "5516043"   "5542176"   "5558156"   "5595205"   "5681152"   "5758823"   "5791601"   "5797414"   "5798465"   "5857619"   "5861703"   "5873408"   "5876187"   "5881954"   "5894990"   "5901037"   "5921757"   "5957413"   "5983944"   "5988522"   "5996903"   "5997671"   "6016969"   "6032464"   "6056204"   "6059020"   "6109222"   "6123145"   "6137891"). PN. OR ("6186748"   "6247525"	AND	OFF	2010/01/05 15:03	

		"6280148"   "6315215"   "6333852"   "6405794"   "6412732"   "6440212"   "6451175"   "6457654"   "6458618"   "6475658"   "6481984"   "6554607"   "6588497"   "6628522"   "6629425"   "6631077"   "6644598"   "6650542"   "6668911"   "6669115"   "6722581"   "6725670"   "6759159"   "6801430"   "6809928"   "6817204"   "6824915"   "6843310"   "6848631"   "6937472"   "6988706"   "7023697"   "7039213"   "7055329"   "7092254"   "RE33448"). PN. OR ("7607470").URPN.				
S18	24	("20010037875"   "20020056908"   "20020080582"   "20020098097"   "20030043531"   "20030066628"   "20030075615"   "20030110788"   "20030133587"   "20030177899"   "20040125561"   "20040231341"   "20050013116"   "20050031137"   "20050074662"   "20050105757"   "20050111185"   "20050121171"   "20050163338"   "20050284612"   "20060016581"   "20060022092"   "20060145027"   "20060164805"   "3464672"   "4031171"   "4170244"   "4238425"   "4257224"   "4350838"   "4406323"   "4498851"   "4501319"   "4533082"   "4590399"   "4590970"   "4595338"   "4664345"   "4667877"   "4693201"   "4697116"   "4697769"   "4708600"   "4727930"   "4763225"   "4780062"   "4802642"   "4923000"   "4930701"   "4930705"   "4932610"   "4938279"   "4938742"   "4939405"   "4941398"   "4969802"   "4976311"   "4989810"   "5008582"   "5034688"   "5040560"   "5083194"   "5107398"   "5137079"   "5142260"   "5154347"   "5156306"   "5165243"   "5183104"   "5190099"   "5199640"   "5199856"   "5209438"   "5226597"   "5242110"   "5251817"   "5303555"   "5316075"   "5335143"   "5346745"   "5361989"   "5395592"   "5402312"   "5411208"   "5419780"   "5429302"   "5437421"   "5493615"   "5516043"   "5542176"   "5558156"   "5595205"   "5681152"   "5758823"   "5791601"   "5797414"   "5798465"   "5857619"   "5861703"   "5873408"   "5876187"   "5881954"   "5894990"   "5901037"   "5921757"   "5957413"   "5983944"   "5988522"   "5996903"   "5997671"   "6016969"   "6032464"   "6056204"   "6059020"   "6109222"   "6123145"   "6137891"). PN. OR ("6186748"   "6247525"   "6280148"   "6315215"   "6333852"   "6405794"   "6412732"   "6440212"   "6451175"   "6457654"   "6458618"   "6475658"   "6481984"   "6554607"	US-PGPUB	AND	OFF	2010/01/05 15:05

		"6588497"   "6628522"   "6629425"   "6631077"   "6644598"   "6650542"   "6668911"   "6669115"   "6722581"   "6725670"   "6759159"   "6801430"   "6809928"   "6817204"   "6824915"   "6843310"   "6848631"   "6937472"   "6988706"   "7023697"   "7039213"   "7055329"   "7092254"   "RE33448"). PN. OR ("7607470").URPN.				
S19	11	("20050035684"   "20060034051"   "4399484"   "4583056"   "5563768"   "5712762"   "5724229"   "6736192"   "7170745"   "7233493"   "7262964"). PN. OR ("7450381").URPN.	US-PGPUB; USPAT; USOCR	AND	OFF	2010/01/05 15:11
S20	788819	((165") or (257") or (417") or (239")).CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/05 15:17
S21	99	S20 (piezoelectric\$3 or thermoelectric \$3 adj3 (frequenc\$3 or amplitud\$3)) (vibrat\$3 adj3 (control\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/05 15:21
S22	11	S21 (gas or fluid or air or airflow adj3 (vibrat\$3 or frequenc\$3 or amplitude) (sound or noise) (control \$3 adj3 (frequenc\$3 or amplitude or vibration))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/05 15:27
S23	18	S21 (gas or fluid or air or airflow adj3 (vibrat\$3 or frequenc\$3 or amplitude) (sound or noise) frequenc \$3 amplitude vibration	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/05 15:30
S24	9	S23 not S22	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/05 15:31
S25	24	S13 (piezoelectric\$3 or thermoelectric \$3 adj3 (frequenc\$3 or amplitud\$3)) (vibrat\$3 adj3 (control\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/05 15:31
S26	6	S25 (gas or fluid or air or airflow adj3 (vibrat\$3 or frequenc\$3 or amplitude) (sound or noise) frequenc \$3 amplitude vibration	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/05 15:31

S27	75	"200909219686" or "5894985" or "5894980" or "5628411" or "6308740"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/05 15:36
S28	0	jp55101800a	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/07 13:38
S29	0	jp 55101800a	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/07 13:38
S30	1	jp "55101800"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/07 13:38
S31	2	jp "1047254"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	OFF	2010/01/07 13:39
S32	38	("20010001278"   "20020175596"   "20030015035"   "20040217671"   "20060006764"   "3743446"   "4011474"   "4063826"   "4170244"   "4322449"   "4498851"   "4512933"   "4595338"   "4684328"   "4697738"   "4753579"   "4780062"   "4834619"   "4923000"   "5008582"   "5256159"   "5419780"   "5520715"   "5628411"   "5697153"   "5702618"   "5705070"   "5861703"   "5982801"   "6065688"   "6164140"   "6252769"   "6308740"   "6361747"   "6467350"   "6576042"   "6638032"   "6654392").PN. OR ("7282837").URPN.	US-PGPUB; USPAT; USOCR	AND	OFF	2010/01/07 14:04
S33	45	("4498851"   "4595338"   "4751713"   "4753579"   "4780062"   "4834619"   "4923000"   "5008582"   "5151626"   "5192197"   "5381950"   "5558156").PN. OR ("5861703").URPN.	US-PGPUB; USPAT; USOCR	AND	OFF	2010/01/07 15:13
S34	0	(10/126867).APP.	US-PGPUB; USOCR	AND	OFF	2010/01/07 15:43

S35	245666	("73").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/07 17:42
S36	978	S35 (amplitude adj3 (range or height or mm or millimeter))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/07 17:43
S37	3	S35 (amplitude adj3 (1mm or 2mm or 3mm))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/07 17:44
S38	1	S36 (amplitude adj3 (1mm or 2mm or 3mm))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/07 17:44
S39	886	S35 (amplitude adj3 (range or height or millimeter))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/07 17:47
S40	168564	("361").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/07 17:48
S41	789155	((("165") or ("257") or ("417") or ("239"))).CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/07 17:48
S42	4	S39 (S40 or S41)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2010/01/07 17:48

1/8/2010 4:41:03 PM

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